Ice and Cold Water Safety

Each winter, many residents are injured from exposure in cold water incidents. Skaters and ice fishermen fall through the ice; boaters and canoeists overturn their crafts.

According to the U.S. Coast Guard, each year there are over 7,000 drownings and 20,000 near-drownings in the United States. Over half of these incidents occur in *cold water*, (water less than 70 degrees F.).



How thick is "safe" ice?

Ice on moving water in rivers, streams and brooks is never safe. The thickness of ice on ponds and lakes depends upon water currents or springs, depth and natural objects such as tree stumps or rocks. Daily changes in temperature cause the ice to expand and contract, which affects its strength. Because of these factors, no one can declare the ice to be absolutely "safe".

The only "safe" ice is at a skating arena!

What do you do if someone falls through the ice?

- Act quickly and call 911 for help immediately. Make sure properly trained and equipped rescue personnel are alerted to respond.
- **DO NOT go out onto the ice.** Many times would-be rescuers become victims themselves.
- **Reach, Throw or Row.** Extend a branch, pole or ladder to the victim. Throw them a bouyant object such as a life ring or float tied to a rope. If a boat is nearby row out to the victim or push it toward them.



FireFACTORS

Office of the State Fire Marshal Department of Fire Services

P.O. Box 1025 State Road • Stow, Massachusetts 01775 • (978) 567-3300 • www.mass.gov/dfs

How cold is cold water?

Any water that is cooler than normal body temperature (98.6° F) is by definition "cold water".

Cold water drains away body heat 25 to 30 times faster than air!

Cold water does not have to be icy, it just has to be colder than you are to cause **hypothermia**.

The lower the temperature of the water, the faster the onset of hypothermia.

What is hypothermia?

Hypothermia is the excessive lowering of body temperature. A drop in core body temperature below 95 degrees F., causes shivering, confusion, loss of muscle strength, and if not treated and reversed hypothermia leads to unconsciousness and death.

Safety experts estimate that half of all drowning victims die from the fatal effects of cold water, not the fatal effects from water-filled lungs!

Personal safety tips

Always wear a personal floatation device (PFD) when boating, any time of year.

Waterlogged clothing makes it difficult to keep your head above the surface of the water.

Dress properly.

Keep your head covered, 50% of body heat is lost through the head. Clothing that is made from man-made fibers does not protect the wearer for long when wet. Wool insulates better from the effects of hypothermia when dry or wet.

If you fall into cold water, get into HELP (Heat Escape Lessening Position).

- Bring your knees to your chest, hold your arms to your sides and clasp your hands, and cover your head if possible to protect your body from heat loss.
- DO NOT try to swim unless a boat, floating object or the shore is close by. Swimming causes "warm" blood to circulate to your arms and legs, where it cools off quickly and reduces survival time by as much as 35-50%!

